KEEGAN, WERLIN & PABIAN, LLP

ATTORNEYS AT LAW
265 FRANKLIN STREET
BOSTON, MASSACHUSETTS 02110-3113

(617) 951-1400

TELECOPIERS:
(617) 951-1354
(617) 951-0586

December 16, 2004

Mary L. Cottrell, Secretary
Department of Telecommunication and Energy
One South Station, 2nd Floor
Boston, MA 02202

Re: City of Cambridge, D.T.E. 04-65

Dear Secretary Cottrell:

Enclosed please find the responses of Cambridge Electric Light Company d/b/a NSTAR Electric ("NSTAR Electric" or the "Company") to discovery questions asked in the above-referenced proceeding, as listed on the following Discovery Log.

Thank you for your attention to this matter.

Very truly yours,

John K. Habib

Enclosures

cc: John Shortsleeve, Esq.
William Stevens, Hearing Officer
Sean Hanley, Rates and Revenues Requirements
James Byrnes, Rates and Revenues Requirements
Mark Barrett, Rates and Revenues Requirements

LOG OF RESPONSES FILED

D.T.E. 04-65

December 16, 2004

Response	Status	Attachments
City 1-1	Filed 12/14/2004 (a.m. filing)	Attachment City-1-1(a) **SENT VIA E-MAIL** Attachment City-1-1-(b) **SENT VIA E-MAIL**
City 1-2	Filed Herewith	Attachment City-1-2 (a) **SENT VIA E-MAIL** Attachment City-1-2 (b) **SENT VIA E-MAIL**
City 1-3	Filed 12/14/2004 (a.m. filing)	Attachment City-1-3(a) **BULK** Attachment City-1-3(b)
City-1-4	Filed 12/14/2004 (p.m. filing)	
City-1-5	Filed 12/14/2004 (a.m. filing)	Attachment City-1-5
City-1-6	Filed December 15, 2004	
City-1-7		
City-1-8		
City-1-9		
City-1-10	Filed December 15, 2004	
City-1-11	Filed 12/14/2004 (p.m. filing)	
City-1-12	Filed 12/14/2004 (p.m. filing)	
City-1-13		
City-1-14		
City-1-15		
City-1-16		
City-1-17		
City-1-18	Filed December 15, 2004	
City-1-19		
City-1-20	Filed December 15, 2004	
City-1-21		
City-1-22	Filed December 15, 2004	
City-1-23		
City-1-24		
City-1-25		
City-1-26		
City-1-27	Filed Herewith	
City-1-28		
City-1-29	Filed Herewith	
City-1-30		
City-1-31		
City-1-32	Filed Herewith	
City-1-33	Filed 12/14/2004 (p.m. filing)	
City-1-34	Filed Herewith	

Response	Status	Attachments
City-1-35	Filed Herewith	
City-1-36	Filed Herewith	
City-1-37	Filed Herewith	
City-1-38	Filed Herewith	
City-1-39	Filed Herewith	
City-1-40	Filed Herewith	
City-1-41	Filed Herewith	
City-1-42	Filed Herewith	
City-1-43	Filed Herewith	
City-1-44	Filed Herewtih	
City-1-45	Filed Herewith	
DTE-1-1	Filed Herewith	
DTE-1-2		
DTE-1-3		
DTE-1-4	Filed Herewith	
DTE-1-5		
DTE-1-6	Filed Herewith	
DTE-1-7	Filed Herewith	
DTE-1-8	Filed Herewith	
DTE-1-9		
DTE-1-10		
DTE-1-11		

Information Request City 1-2

Please provide in electronic form (including all formulae) all other spreadsheets on which the spreadsheets for Exhibits NSTAR-1 and NSTAR-2 rely.

Response

For Columns A, B, C and D, please see Attachment City-1-2(a) for the supporting documentation for Exhibit NSTAR-1, and Attachment City-1-2(b) for the supporting documentation for Exhibit NSTAR-2. These files are direct downloads from NSTAR's mainframe-based PowerPlant software. The Company is providing these files via e-mail.

Information Request City 1-27

Please provide the derivation of depreciation reserve for each line of Exhibit NSTAR-1, including assumptions, calculations, and workpapers.

Response

The reserve for streetlighting equipment is maintained for the total streetlighting equipment class because the Department does not require the Company to maintain separate reserve balances by vintage year for its units of mass property. This is the common practice within the utility industry. As explained in the Company's response to Information Request DTE-1-1, the Company's PowerPlant software maintains the streetlighting equipment depreciation reserve account in total, and provides a report that spreads this depreciation reserve to the various sub-accounts according to vintage dollars using Iowa curves. Since the allocation is done by the Company's mainframe computer, it is not possible to provide the specific calculation for each line.

Information Request City 1-29

Regarding the use of Iowa curves to determine accumulated depreciation (as stated in the Exhibit CAM-4, July 28, 2003 e-mail, page 2), please indicate whether this methodology is used to determine:

a) the depreciation rate,

b) the total accumulated depreciation for all plant in account 373 in Exhibits NSTAR-1 and NSTAR-2,

c) accumulated depreciation for each vintage separately for each line of Exhibits NSTAR-1 and NSTAR-2.

Response

The Iowa curves have the following effects:

a) Typically, the Company undertakes a depreciation study for the purpose of determining appropriate depreciation rates as part of an overall base rate filing. In a depreciation study, Iowa curves are utilized to establish the average remaining useful life of each vintage of utility plant. If the Department accepts its results, the depreciation study serves as the basis for the Company's depreciation rates. Once set by the Department, depreciation rates are not changed until the Company's next base rate change and are thus unaffected by the Iowa curves in the interim period. The Company notes that the Department acknowledged the validity of Iowa curves in its order in D.P.U. 92-250 in which the Department established the depreciation rates currently used by the Company. In that order, which was provided in this proceeding as Attachment City-1-3(b), the Department said:

> "Iowa curves are frequency distribution curves initially developed in the 1930's at Iowa State University and widely accepted in determining average life frequencies. There are 28 different Iowa curves, each identified by their particular dispersion characteristics."

D.P.U. 92-250, at 58, n. 28.

b) The total accumulated depreciation in these exhibits is obtained from the Company's books and is not affected by the Iowa curves.

c) The Iowa curves do affect the allocation of the actual accumulated

depreciation balance to each vintage year on Exhibits NSTAR-1 and NSTAR-2. The use of the Iowa curves is only for the purpose of associating the total streetlighting accumulated depreciation with the vintage years. The resulting book value in each of those vintage years is then allocated between City, MDC and private lights to accurately determine the value of the City's lights. If the Company had simply allocated the net book value of streetlights by the number of lights, the result is that the City's price as of December 31, 2003 would have been $1,907,908.62 ($2,218,498.40 from Exhibit NSTAR-1, Line 284, Column E, times the percent of City lights (86 percent)) compared to the $1,724,206.33 (see Exhibit NSTAR-1, Line 284, Col L) calculated by the Company using the Iowa curves to allocate accumulated depreciation. Similarly, as of September 30, 2004, the City's price would have been $1,777,818.95 without the use of the Iowa curves compared to the $1,624,711.25 (see Exhibit NSTAR-2, Line 288, Col L). Thus, the City benefits from the use of the Iowa curves to allocate accumulated depreciation to the differing vintages of streetlighting equipment.

Information Request City 1-32

For equipment of 1943 vintage only, please provide retirements and a calculation of accumulated depreciation, by year.

Response

The Company does have detailed records (individual retirements for vintage 1943 only) necessary to respond this question, nor are such records needed to determine the unamortized investment relating to streetlighting plant in Cambridge. This request is well beyond the record retention requirements of the Department.

Information Request City 1-34

Please demonstrate that the depreciation reserve at year-end 2003 in total and for each line (that is, vintage and subaccount) of Exhibit NSTAR-l is consistent with the Department's past approved depreciation rates for streetlighting, as stated in the Vaughan Affidavit, paragraph 12.

Response

The total depreciation reserve at year-end 2003 has been established through the years by using Department-approved depreciation rates, gross plant values, actual retirements, costs of removal and net salvage values as directed in the Code of Federal Regulations, Title 18, Chapter 1, Part 101 of the Uniform System of Accounts prescribed for Public Utilities, Balance Sheet Accounts, Accumulated Provision for Depreciation of Electric Utility Plant. The Company's books are regularly audited by its external auditors and by FERC. As discussed in the Company's response to Information Requests DTE-1-1 and City-1-29, the total depreciation reserve at year-end 2003 is then allocated to the vintages and sub-accounts using Iowa curves.

Information Request City 1-35

Comparing Exhibits NSTAR-1 and NSTAR-2, please demonstrate that the change between December 31, 2003 and September 30, 2004 in accumulated depreciation, in total and for each line (that is, vintage and sub-account) separately, is consistent with the Company's most recently approved depreciation rate for streetlighting, as stated in the Vaughan Affidavit, paragraph 13.

Response

The Company is unable to respond to this request because it is based on an incorrect premise. The change in the depreciation reserve between December 31, 2003 and September 30, 2004 reflects the actual activity within the Company's accounting records. One component of this change is depreciation expense, which is calculated utilizing the latest Department-approved depreciation rates. The total depreciation reserve at year-end 2003 and September 30, 2004 has been established through the years by using Department-approved depreciation rates, gross plant values, actual retirements, costs of removal and net salvage values as directed in the Code of Federal Regulations, Title 18, Chapter 1, Part 101 of the Uniform System of Accounts prescribed for Public Utilities, Balance Sheet Accounts, Accumulated Provision for Depreciation of Electric Utility Plant. As discussed in the Company's responses to Information Requests DTE-1-1 and City-1-29, the total depreciation reserve at year-end 2003 and September 30, 2004 is then allocated to the vintages and sub-accounts using Iowa curves.

Information Request City 1-36

Regarding the equipment in 1944 Sub-Account 634-Street Lighting Underground Conductors, please:

(a) confirm that Exhibit NSTAR-2 does not reflect any retirements in 2004 of equipment in this sub-account and vintage. If there were retirements, explain why there is no charge in Cost from that in Exhibit NSTAR-1.

(b) confirm that the depreciation on this equipment after December 31, 2003 as of September 30, 2004 is the difference between net reserve in Exhibit NSTAR-2 and net reserve in Exhibit NSTAR-1 for this subaccount and vintage. If not, provide the correct calculation. Confirm that the depreciation on this equipment amounts to 5.3% over the nine mouths 12/31/03 to 9/30/04. If not, provide the correct percentage and explain how it was calculated.

(c) confirm that the 5.3% depreciation over the nine mouths 12/31/03 to 9/30/04 amounts to a 7% annual rate. If not, provide the correct percentage and explain how it was calculated.

(d) show how the 2004 Reserve for this equipment in Exhibit NSTAR-2 can be derived from the 2003 Reserve in Exhibit NSTAR-1 using the most recently approved Department-approved depreciation rate.

Response

Regarding the equipment in 1944 Sub-Account 634-Street Lighting Underground Conductors:

(a) The Company confirms that there were no retirements in this account between the dates of Exhibit NSTAR-1 and Exhibit NSTAR-2. The total cost of the 1944 Sub-Account 634 is $41,855 and is identical in both Exhibits NSTAR-1 and NSTAR-2.

(b) The Company is unable to fully respond to this question because it is based on an incorrect premise. The difference between the net reserve in Exhibit NSTAR-1 and Exhibit NSTAR-2 does not represent the depreciation expense on this equipment. The question incorrectly assumes that depreciation expense is calculated individually and further incorrectly assumes that depreciation expense is the only item that affects accumulated depreciation. The Company does not calculate depreciation expense on individual units of property, sub-accounts, or vintages of plant. The Company calculates depreciation expense in total for all streetlight plant. As discussed in the Company's response to Information Request

City-1-29, the accumulated depreciation relating to the individual vintages and sub-accounts shown on Exhibit NSTAR-1 and Exhibit NSTAR-2 are determined by the application of Iowa curves to the total accumulated depreciation, which also includes the effect of retirements, cost of removal and net salvage. The Company calculated total streetlighting depreciation expense for the period December 31, 2003 through September 30, 2004 at an annual rate of 6.29 percent. Thus, the effective rate for the nine-month period is approximately 4.72 percent.

(c) Please see the Company's response to (b), above.

(d) Please see the Company's response to (b), above.

Information Request City 1-37

Regarding the equipment in 1996 Sub-Account 635-Municipal Posts, Fixtures and Luminaires, please:

(a) confirm that Exhibit NSTAR-2 does not reflect any retirements in 2004 of equipment in this sub-account and vintage. If there were retirements, explain why there is no change in Cost from that in Exhibit NSTAR-1.

(b) confirm that the depreciation on this equipment after December 31, 2003 as of September 30, 2004 is the difference between net reserve in Exhibit NSTAR-2 and net reserve in Exhibit NSTAR-1 for this subaccount and vintage. If not, provide the correct calculation.

(c) confirm that the depreciation on this equipment amounts to 3.2% over the nine months 12/31/03 to 9/30/04. If not, provide the correct percentage and explain how it was calculated.

(d) confirm that the 3.2% depreciation over the nine months 12/31/03 to 9/30/04 amounts to a 4.2% annual rate. If not, provide the correct percentage and explain how it was calculated.

(e) show how the 2004 Reserve for this equipment in Exhibit NSTAR-2 can be derived from the 2003 Reserve in Exhibit NSTAR-1 using the most recently approved Department-approved depreciation rate.

Response

Regarding the equipment in 1996 Sub-Account 635-Municipal Posts, Fixtures and Luminaires:

(a) The Company confirms that there were no retirements in this account during 2004.

(b) The Company is unable to fully respond to this question because it is based on an incorrect premise. The difference between the net reserve in Exhibit NSTAR-1 and Exhibit NSTAR-2 does not represent the depreciation expense on this equipment. The question incorrectly assumes that depreciation expense is calculated individually and further incorrectly assumes that depreciation expense is the only item that affects accumulated depreciation. The Company does not calculate depreciation expense on individual units of property, sub-accounts, or vintages of plant. The Company calculates depreciation expense in total for all streetlight plant. As discussed in the Company's response to Information Request City-1-29, the accumulated depreciation relating to the individual vintages

and sub-accounts shown on Exhibit NSTAR-1 and Exhibit NSTAR-2 are determined by the application of Iowa curves to the total accumulated depreciation, which also includes the effect of retirements, cost of removal and net salvage. The Company calculated total streetlighting depreciation expense for the period December 31, 2003 through September 30, 2004 at an annual rate of 6.29 percent. Thus, the effective rate for the nine-month period is approximately 4.72 percent.

(c) Please see the Company's response to (b) above.

(d) Please see the Company's response to (b) above.

(e) Please see the Company's response to (b) above.

Information Request City 1-38

Regarding transfers to streetlighting accounts, please indicate whether the Exhibits NSTAR-1 and NSTAR-2 reflect the accumulated depreciation associated with those transfers.

(a) If so, explain how.

(b) If not, explain why not.

Response

The transfers to and from streetlighting accounts affect the gross plant, and thus, also affect the calculation of depreciation expense going forward. The Company adjusts the accumulated depreciation account whenever transfers are made.

Information Request City 1-39

Please indicate whether the Exhibits NSTAR-1 and NSTAR-2 reflect the accumulated depreciation associated with the 1976 adjustment of $ 98,890 (shown in Exhibit CAM-3).

(a) If so, explain how.

(b) If not, explain why not.

Response

Please refer to response to Information Request City 1-38.

Information Request City 1-40

Please explain why the 2002 Cost in subaccount 634-Street Lighting Underground Conductors is negative (according to Exhibit NSTAR-1 and NSTAR-2).

Response

The 2002 credit balance in Account 634, Street Lighting Underground Conductors, is the result of a recovery of costs associated with billing for property damages.

Information Request City 1-41

Please indicate whether the accumulated depreciation associated with the 1942 beginning Balance of $376,009 (according to Exhibit CAM-3) is reflected in Exhibits NSTAR-1 and NSTAR-2.

If so, explain how, with reference to the Exhibit NSTAR-1 and NSTAR-2 workpapers. If not, explain why not.

Response

The Company cannot directly respond to this question because it is based on an incorrect premise. The accumulated depreciation reflected in Exhibit NSTAR-1 and Exhibit NSTAR-2 reflects the total amount recorded on the Company's books as of December 31, 2003 and September 30, 2004, respectively. As discussed in the Company's responses to Information Requests DTE-1-1 and City-1-29, accumulated depreciation is allocated to the individual vintage years and sub-accounts using Iowa curves only for the purpose of more accurately determining the City's price for the lights.

Information Request City 1-42

Please provide the depreciation reserve associated with the 1942 Beginning Balance of $376,009 as of December 31, 2003 and as of September 30, 2004. Include supporting workpapers.

Response

The Company cannot directly respond to this question because it is based on an incorrect premise. The accumulated depreciation reflected in Exhibit NSTAR-1 and Exhibit NSTAR-2 reflects the total amount recorded on the Company's books as of December 31, 2003 and September 30, 2004, respectively. As discussed in the Company's responses to Information Requests DTE-1-1 and City-1-29, accumulated depreciation is allocated to the individual vintage years and sub-accounts using Iowa curves only for the purpose of more accurately determining the City's price for the lights.

Information Request City 1-43

Please provide the retirements by year of pre-1942 streetlighting additions still in-service after 1941.

Response

The assets referred to in this question were placed in-service more than 60 years ago. The Company does not retain records that far back that would enable us to respond to this request.

Information Request City 1-44

Please specify the depreciation expense, retirements and all other cost factors that account for the change from Exhibit NSTAR-1 to Exhibit NSTAR-2 in the Cost and Reserve figures for:

(1) the 1971 Sub-Account 634-Street Lighting Underground Conductors,

(2) the 1990 Sub-Account 635-Municipal Posts, Fixtures and Luminaries, and

(3) the 1991 Sub-Account 632-Street Lighting Overhead Conductors.

Response

The Company is unable to fully respond to this question because it is based on an incorrect premise. The Cost figures shown on Exhibit NSTAR-1 and NSTAR-2 in the years and accounts specified are reflective of the actual additions and retirements relating to those specified sub-accounts. Thus, any change in Original Cost between the two exhibits reflects actual retirement activity that occurred between December 31, 2003 and September 30, 2004, the dates of the two exhibits. The reserve for streetlighting equipment is maintained for the total streetlighting equipment class because the Department does not require the Company to maintain separate reserve balances by vintage year for its units of mass property. This is the common practice within the utility industry. The Company's Power Plant software maintains the streetlighting equipment depreciation reserve account in total, and provides a report that spreads this depreciation reserve to the various subaccounts according to vintage dollars using Iowa curves.

Information Request City 1-45

Please explain the following differences in the Cost data in Exhibits NSTAR-1 and NSTAR-2:

(1) increase in the 2002 sub-account 635-Muncipal Posts, Fixtures and Luminairies from $25.06 to $8,782.85.

(2) increase in the total for all of Account 373 in 2002 from $7,490.65 to $10,563.59.

(3) increase in the 2003 sub-account 635-Muncipal Posts, Fixtures and Luminaires from $8,333.65 to $16,058.74.

Response

Each of the differences result from additional late charges and credits that were posted to the General Ledger in 2004 that affected streetlighting assets with vintage years of 2002 and 2003.

Information Request DTE-1-1

Refer to exh. NSTAR-1, at 1 column D. Provide complete and detailed documentation to explain the analysis and exact calculations that produced the "Reserve" used by the Company to calculate Cambridge's streetlight purchase price including:

a) All values used in the calculations;

b) Definitions of all values;

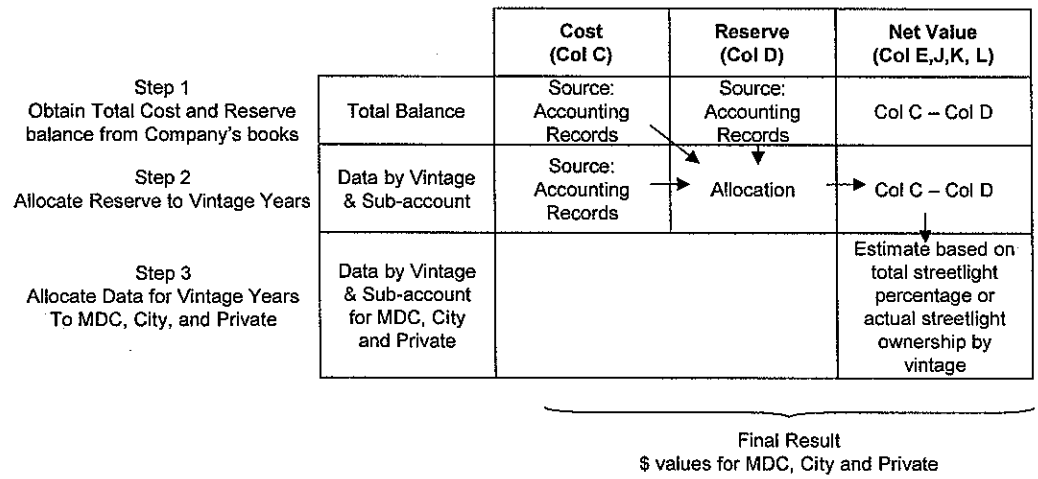
c) Origins of all values;

d) All work papers related to said values and calculations.

Response

Please refer to the following figure for the method of determining the City's streetlight purchase price.

Derivation of NSTAR 1 and NSTAR 2



The "Reserve" in column D of Exhibit NSTAR-1 is determined using a two-step process.

First, the total plant balance (installed cost) of the Cambridge streetlight equipment and its associated accumulated depreciation is obtained from current accounting records. This includes the cost of materials and labor to install the equipment. It also includes applicable overheads such as labor (benefits), supervision, stores and transportation. For streetlights, these amounts are

accumulated in plant account 373. For a detailed description of the calculation for accumulated depreciation, please refer to the response to Information Request City-1-9.

The second step was to allocate the total reserve to individual vintage years and sub-accounts. The original cost of each vintage and sub-accounts for the current year is available from accounting records. The Company does not maintain reserve data by vintage year, therefore, the reserve for each vintage and sub-account and must be calculated. The Company used Iowa curves in order to allocate this reserve to each vintage year. Please also refer to the response to Information Request City-1-29 for a discussion of the use of Iowa curves to allocate the accumulated depreciation to individual vintage years. The Company notes that the Department acknowledged the validity of Iowa curves in its order in D.P.U. 92-250 in which the Department established the depreciation rates currently used by the Company. In that order, the Department stated the following:

> "Iowa curves are frequency distribution curves initially developed in the 1930's at Iowa State University and widely accepted in determining average life frequencies. There are 28 different Iowa curves, each identified by their particular dispersion characteristics."

D.P.U. 92-250, at 58, n 28.

Once the Accumulated Depreciation has been associated with the individual vintage years, the third step of the pricing allocates the net book value in Column E to either Private, City or MDC shares. The number of Private and MDC streetlights versus City streetlights was obtained from the Company's Detailed Property Record System. In cases where the system did not have streetlights for the particular vintage, the overall streetlight allocation percentage of 7%, 7%, and 86% was used. Thus the City's share of the lights was calculated to be 78% of the total net book value (Exhibit NSTAR-1, line 284).

Information Request DTE-1-4

Refer to the Affidavit of Christine L. Vaughan at 3, ¶ 12. Provide complete and detailed documentation to fully describe the method and data used in determining the "average remaining service life of the entire population of streetlighting assets" that was used in part to determine the depreciation rate the Company uses to calculate depreciation for its streetlight equipment.

a) In your answer, explain the reasons why the Company used this method to determine the unamortized value.

b) Indicate in your response whether the depreciation rates were approved by the Department for ratemaking purposes.

Response

The depreciation rate the Company uses to calculate depreciation for its streetlight equipment was established by the Department in D.P.U. 92-250. Until otherwise ordered by the Department, the Company is not permitted to utilize any other depreciation rate. In that proceeding, the Company's expert witness provided testimony about the average age of existing plant, the expected remaining life and the unrecovered value of that equipment. A complete copy of the testimony and workpapers sponsored by that witness has been provided as Attachment City-1-3(a) BULK.

a) The Company used this method to comply with Department precedent and normal rate-making practice in the establishment of depreciation rates.

b) These rates were approved by the Department in D.P.U. 92-250. A copy of the relevant portion of the Department's order in that docket has been provided as Attachment City-1-3(b).

Information Request DTE-1-6

Refer to Exh. CAM-4, at 1. Define the term "Vintage year book value" as referenced. Provide complete and detailed documentation to support your response.

Response

The term "vintage year book value" refers to the estimated remaining book value of streetlighting equipment installed in a particular year. As discussed more fully in the Company's response to Information Requests DTE-1-1 and City-1-29, the Company maintains a depreciation reserve for streetlights as a whole. In order to determine the value of lights of a particular vintage, the Company's Power Plant software allocates that total accumulated depreciation to the differing vintages of streetlighting equipment using Iowa curves. For ease of reference, we refer to this value as the vintage year book value.

Information Request DTE-1-7

Refer to exh. CAM-4, at 1 of 3. Describe how the Company determined "Vintage year book value." Provide all values, definitions and origins of values, and all workpapers used in calculating said value. Include complete and detailed documentation to support your response.

Response

Please refer to the Company's responses to Information Requests DTE-1-1 and DTE-1-6.

Information Request DTE-1-8

Refer to Exh. CAM-4 at 1 of 3. Explain how the Company used "Vintage year book value" to calculate the purchase price the Company has submitted to Cambridge for the purchase of streetlights. Provide complete and detailed documentation to support your response.

Response

As discussed more fully in the Company's response to Information Requests City-1-9 and City-1-29, the Company maintains a depreciation reserve for streetlights as a whole. This approach is consistent with the typical practice within the utility industry and the accepted record keeping approach of the Department for the establishment of utility plant depreciation rates. In order to determine the value of lights of a particular vintage, the Company's Power Plant software allocates that total accumulated depreciation to the differing vintages of streetlighting equipment using Iowa curves. The Company then determines the number of City, MDC or private lights installed in that year and allocates the book value of that vintage year according to the number of lights in each category. This is best seen in Exhibits NSTAR-1 and NSTAR-2, by looking at individual vintage years. Using this method of allocating lights allows the calculation to reflect the relative age of the lights being purchased.